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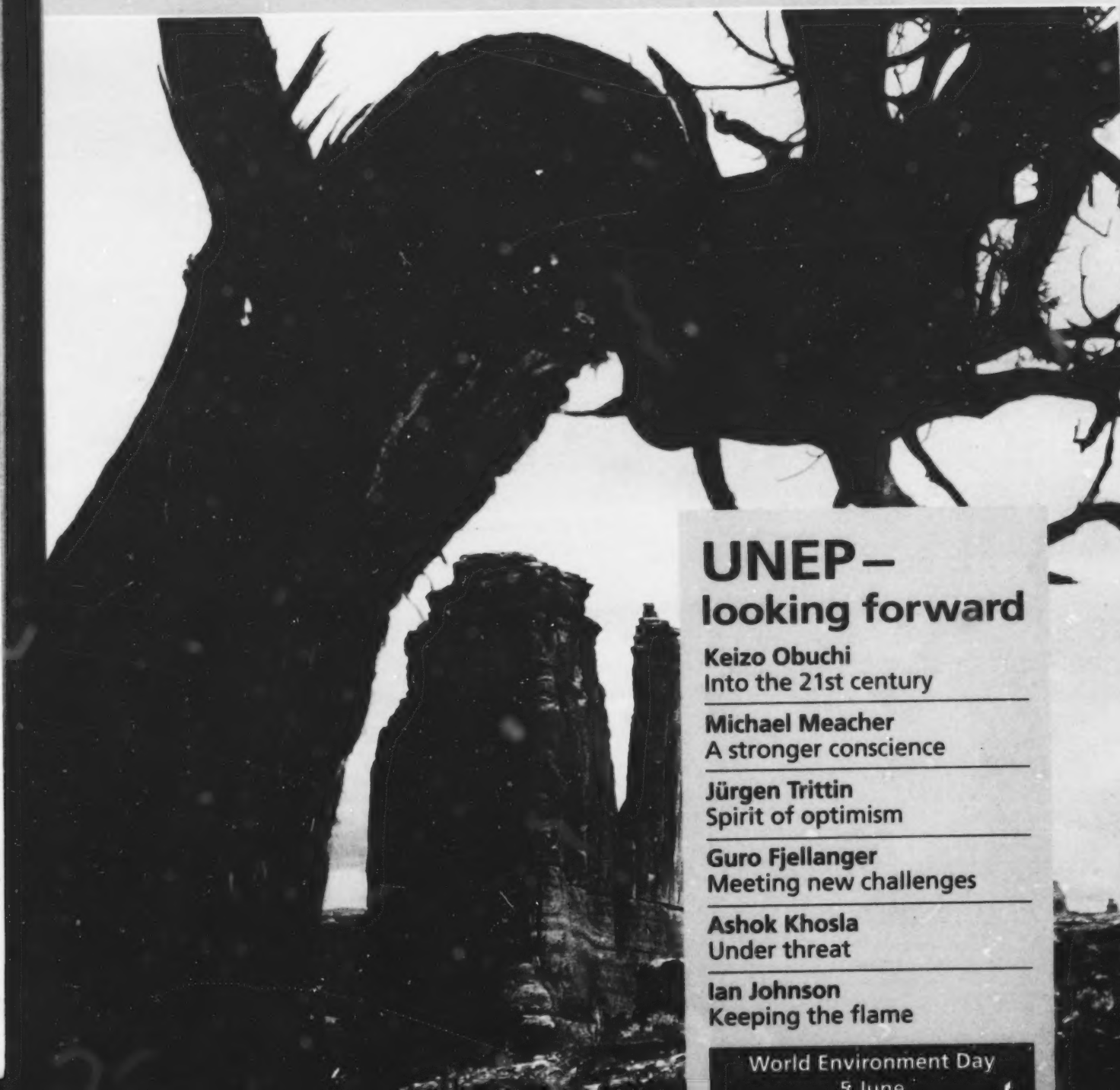

UNEP– looking forward

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Into the 21st century

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EDITORIAL

KLAUS TÖPFER
United Nations Under-Secretary General and Executive Director, UNEP

At the dawn of the new millennium, 'globalization' is the dominant tendency. Technology and enhanced communication systems are dissolving geographical distance and political boundaries.

Globalization's positive aspects are numerous, including enhanced access to goods and services propelled by the world economy and cultural change, both of which appear to bring progress and new opportunities to the peoples on Earth.

But its trade-offs, such as the impacts of the predominant development model on the global environment, are less well understood and should be a major concern for us all. This model has led to the dismantling of local economies and communities, the decline of traditional family farms and the destruction of renewable resources. As a result, climate change, loss of biological diversity, depletion of the ozone layer, pollution, exhaustion of water resources and conflicts over shared resources are some of our most pressing problems.

Schmitt

Effectively, the life-support systems on which our economies depend are being overloaded, and unless we move towards sustainable development, we could face severe and irreversible environmental damage.

Apart from profound ethical and aesthetic implications, the loss of biological diversity has serious economic and social costs. Genes, species, ecosystems and human knowledge represent a living library of options available for preventing and/or adapting to local and global change. Biological diversity sustains our daily lives and provides the resources on which we and future generations will depend.

Biological diversity must be appreciated in terms of human diversity, because different cultures understand it in different ways. Both diversities are fundamental to stability and durable peace on Earth. But creating forms of development that are sustainable because they are in harmony with the needs and aspirations of different cultures implies breaking current development patterns which render the lives and perspectives of some of the world's peoples invisible.

In recent times, the separation of spirit from matter has become a prevailing philosophical approach. A re-evaluation of this precept is being shaped by the major religions of the world in response to the global environmental crisis. This may have profound repercussions on the way both individuals and their societies perceive the environment, leading to more responsible actions.

While placing monetary value on species and ecosystems is a useful exercise in integrating the cost of using and conserving biological diversity in the current global economic system, it will never be possible to comprehend its true value in such a system.

The very origins of conservation lie buried in ancient cultures found throughout the world. Modern environmental movements express various ideologies of these belief systems, yet do not always acknowledge the debt to their forebears, nor to those who still embody these ideals. Learning and respecting the ways of today's indigenous and traditional peoples – most of whom inhabit areas of exceptional biological diversity – and integrating them into environmental and development considerations is indispensable for the survival of diversity. But this requires that the contributions of indigenous and traditional peoples be made visible.

Recent economic and financial shocks in the global economy have increased the risk of short-term financial crises resulting in the rolling back of gains made in national environmental policies and environmental cooperation at the regional and global level. But we must ensure that the financial set-backs do not result in the long-term reversal of environmental policies. Let us not forget that the protection of fragile ecosystems, species and natural resources are as important as safeguarding economic growth. We must keep in mind that medium and long-term economic growth and stability as well as poverty eradication depend on the stability and diversity of the natural environment. And we must, as a matter of necessity, integrate environmental considerations into both the macroeconomic framework as a response to the financial crisis and the reconstruction plans following natural disasters.

If World Environment Day, to be celebrated this year in Tokyo, Japan, has one important message, it is that we must resolve to weave the life-sustaining customs of all the Earth's people into a resilient fabric that will save and protect the sanctity of all life •

Into the 21st century

KEIZO OBUCHI welcomes UNEP's reform and says that its importance will increase as it tackles the issues of the next century

I am specially pleased that Japan has been accorded the privilege of holding the celebrations to commemorate World Environment Day this year. Appreciating the significance of the occasion as an opportunity to demonstrate to the world Japan's active involvement in working on environmental issues, and recognizing the importance of this occasion as an arena for rallying international spirit in anticipation of the United Nations conference on environment (Rio +10), to be held in 2002, the Japanese ministerial meeting of the Cabinet accepted UNEP's invitation to host the commemorative celebrations.

As everyone knows, environmental degradation first appeared mainly as localized problems in developed countries. But following the rapid expansion of human activities through the development of science and technology, the problems have grown into a serious global menace. Global warming, destruction of the ozone layer and, more recently, endocrine disruptors are problems that threaten the basis of human existence; indeed, these are issues that affect 'human security'.

The environmental issues of today are as diverse as they are serious. Since the Industrial Revolution, humankind has consumed vast quantities of fossil fuels and other resources that require extremely long periods of time to accumulate, and has produced waste in quantities far greater than can be absorbed by natural ecosystems. This has led to such environmental problems as global warming and environmental pollution. In most cases, the daily life and economic base of developing regions tend to depend upon natural resources such as forests, soil and water, so that many of the efforts to combat poverty, hunger, disease and illiteracy inevitably result in the destruction of nature and the deterioration of living conditions, exacerbated by the effects of population growth and urbanization. In the midst of socio-economic globalization, all these problems are interconnected, and environmental damage is becoming ever more complex and serious.

Stress reduction

For a solution to such situations, we, humankind, must try to reduce the stress on the environment by fostering environmentally sound life-cycles for the substances we use and emit into the environment in the process of our own activities. We must try to understand the mechanisms of nature, and conduct our activities in ways that enable us to live in harmony with the natural world. In developing regions, the first priority must be to provide sustainable livelihoods by increasing funding, creating employment opportunities, eradicating poverty and encouraging policy making that gives due attention to the socially disadvantaged; by enhancing technology transfer and development; and by strengthening the development of human resources. These are all matters on which developed and developing countries must work together.

Japan considers global environmental issues a priority policy area, and contributes to both domestic and international efforts. The Japanese Government has established and been implementing the Basic Environment Plan, which prescribes long-term national objectives. This Plan aims to build a society based on the environmentally sound life-cycle of materials and on the harmonious coexistence of mankind and nature in its entirety, involving the participation of all members of society, as well as international activities.

Concerning international activities, the Japanese Government takes special pride in having hosted the third session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) held in Kyoto in December 1997, and in having contributed as the host country to the adoption of the Kyoto Protocol, an historic step forward for humankind's work on global warming. Regarding support for developing countries, at the United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro in 1992, Japan announced an allocation of 900 to 1,000 billion yen in environmentally related overseas development assistance (ODA) over a five-year period, and subsequently provided

S. Price/UNEP/Topham Picturepoint

nearly 1,500 billion yen. At the special session of the United Nations General Assembly on Environment and Development in June 1997, Japan announced its Initiatives for Sustainable Development toward the 21st century, a comprehensive plan for ODA support for environmental cooperation; and on the occasion of COP3, Japan launched the Kyoto Initiative, an ODA support package for activities in the field of global warming. Such commitments represent Japan's keen determination to support developing countries in the environmental arena.

The Earth Summit of 1992, with the adoption of Agenda 21, carries special significance for global environmental issues in the 21st century, specifying action plans, in all areas, necessary for mankind to prosper in harmony with the other creatures on Earth. We are now at the stage where all the decisions made at the meeting should be put into action in a concrete form. To that end, United Nations organizations including UNEP have made ongoing efforts and achieved steady progress. Japan appreciates those efforts. In the meantime, global environmental problems are becoming more serious at an accelerated rate. In the 21st century, therefore, I believe that our most important task will be to seek ways to make various international actions more effective and to implement them more efficiently.

Meeting demands

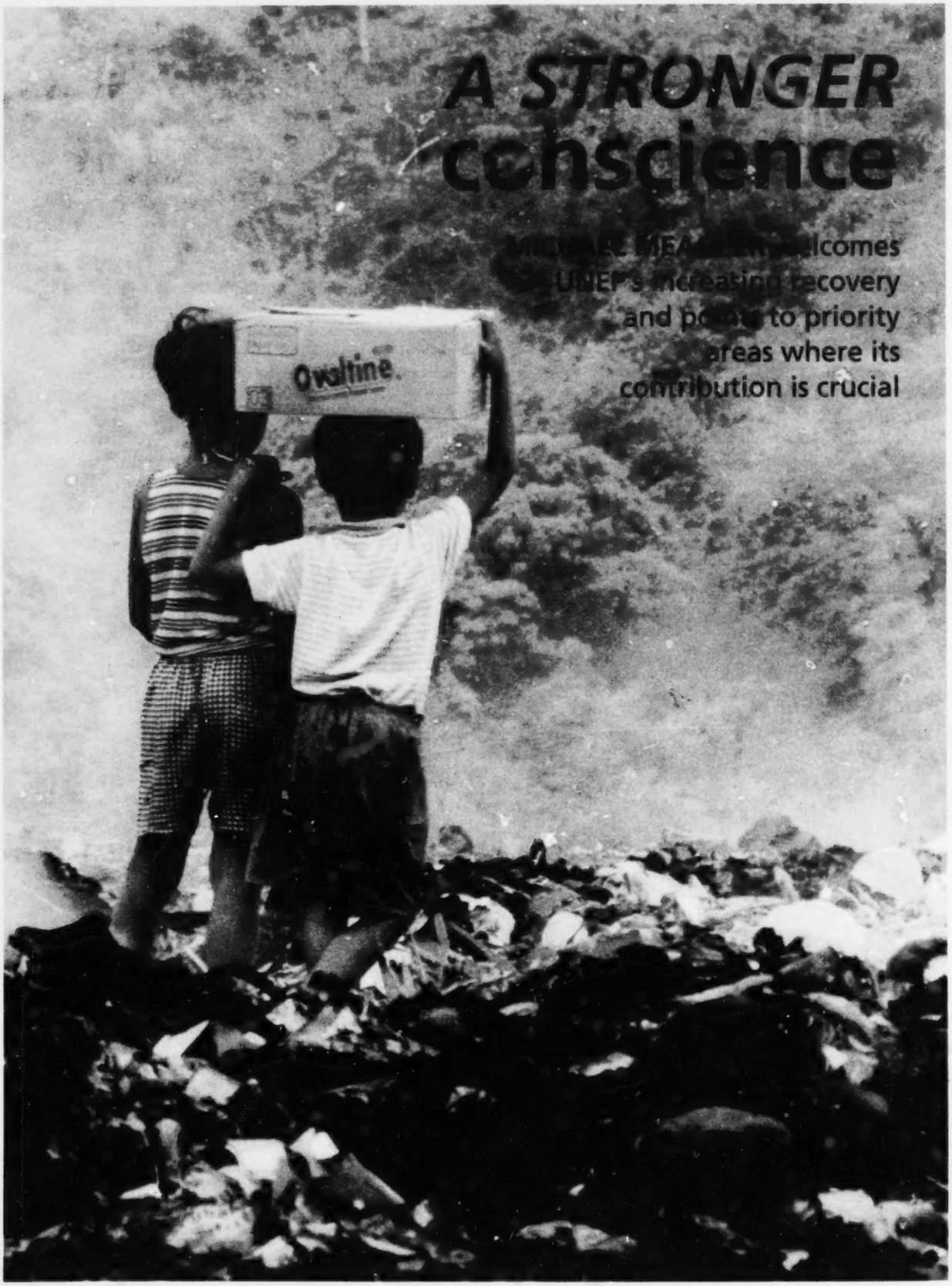
There is no doubt that the importance of UNEP will increase in fulfilment of such a task. The international community expects UNEP to cope with the emerging demand to tackle worldwide environmental problems through its role as the leading global environmental authority within the United Nations system. Klaus Töpfer, Executive Director of UNEP, and other concerned individuals are working for the reformation of UNEP; for its revitalization and improved efficiency. The Japanese Government has stressed the need for these changes, and I understand that the current reformation process is consistent with Japan's request. It is my sincere wish that the process will further progress and result in a significant contribution to the solution of global environmental problems.

World Environment Day celebrations offer an incentive to further enhance public awareness on global environmental issues

World Environment Day celebrations in Tokyo this year offer an incentive to further enhance public awareness in Japan on global environmental issues. For instance, the Global Commons World Environment Conference, taking place from 3-5 June this year in conjunction with the celebrations and bringing together knowledgeable people from around the world, is being organized by Global Environmental Action, of which I served as Deputy Chairman. The aim of this Conference is to identify appropriate environmental policy directions which should go beyond the individual national framework, in the understanding that chronic degradation of the global environment is threatening the 'global commons'.

For the sake of human security, Japan is determined to do its utmost, in close cooperation with UNEP, to ensure the success of Rio +10 and to contribute to the progress of 21st century-oriented environmental policies, by taking every opportunity and bringing together all related knowledge and effort•

Keizo Obuchi is the Prime Minister of Japan.



Roman I. Castillo/UNEP/Topham Picturepoint

It is sobering, as we stand on the threshold of the millennium, that it is only in the last 50 years since the birth of the United Nations, that humankind has managed to create an organization that has, at its root, the simple aim of helping the planet, its wildlife and biodiversity, rather than those who seek to have mastery over it.

Whether we survive as a species will depend on whether we accept the early warnings now all too manifest of ecological and environmental disaster, or ignore them and face a race against time to repair the damage caused by short-sighted political expediency. The United Nations, and through it UNEP, has a vital role to play in bridging that gap through education and understanding.

As UNEP's mission statement says: 'To provide leadership and encourage partnership in caring for the environment by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations.'

And so as we contemplate the last 2,000 years and look forward to the next 1,000, it is opportune to put UNEP's brief existence into perspective. Ideals are not created overnight, they evolve.

No easy task

UNEP was built on the Stockholm Conference of 1972; it has had a mere 27 years of trying to forge agreement, understanding and cooperation between diverse states, their people and their beliefs. It has been the environmental conscience of the United Nations.

If it has, at times, stumbled during its comparatively short life, it is only to be expected. What it set out to do was never going to be easy. It has gone through a difficult time in the last few years, but I believe the changes it has made will make it all the stronger and better able to handle difficult situations in the coming years.

World Environment Day is therefore an ideal opportunity both to review what we have achieved so far and to look forward to what we can accomplish in the future.

The United Kingdom has long supported UNEP to fulfil its role, on the global environment, as the voice within the United Nations system.

I am also pleased to see the support that Klaus Töpfer gave to the United Kingdom's recent Budget when he said it 'put the green agenda at the heart of government'.

I believe the United Kingdom's budget put the principles of sustainable development into action. It was about discouraging the emission of greenhouse gases and penalizing waste, at the same time as creating jobs and increasing efficiency. For example, proceeds from the climate change levy will be ploughed back into businesses, jobs and help with energy efficiency. We have shown that environmental taxes are not merely about raising revenue – they are also about changing behaviour and improving the quality of life and the environment.

Gaining ground

The 20th Governing Council, held in Nairobi in February this year, marked an important step forward for UNEP. The Nairobi Declaration set out a clear focus for UNEP's work, and the practical implementation of this statement of intent will be a major mark of UNEP's progress in becoming a powerful global player in the 21st century. I believe this process of ▶

Jo Ann Pomeroy/UNEP/Topham Picturepoint

reform has helped UNEP to recognize what its challenges are and what role it can best play. I hope the decisions we agreed in February can be taken forward as soon as possible. In particular I hope that the Environment Management Group will be a force for environmental integration throughout the United Nations system. I strongly support the recommendation to involve civil society more closely in our deliberations. This is an approach that has been a particularly successful achievement of the Commission on Sustainable Development (CSD) and a way of working which the United Kingdom very much endorses.

The new approach that connects the programme to the Nairobi Declaration is a real advance. Its programme of work is now focused more broadly along the right lines with priorities geared towards those areas where UNEP can make the biggest contribution and have the most powerful impact. It has already done excellent work in areas such as chemicals, oceans, environmental law and biotechnology.

Key to stability

But change and reform are never easy. They require difficult decisions and hard work if they are to be successfully implemented.

I am sure other members of UNEP agree with me that the key to UNEP's long-term stability is having adequate, stable and predictable financial resources, especially through the Environment Fund. The budget line was a clear measure of support for the way in which Klaus Töpfer is taking the organization.

As a measure of the United Kingdom's commitment to UNEP it was a pleasure to announce that we shall be maintaining its level of support, around £4.5 million ($7 million). But I do have to say this decision was not an easy one. The message of support has a 'health warning' attached. UNEP's financial management still needs considerable improvement. Member states need concise and clear advice on the budget if they are to be expected to continue to provide financial support. However, I was also able to announce a further contribution of £95,000 ($150,000) towards spares and the transmission of spares for the Mercure satellite communication system.

We need to ensure that UNEP is a vital and relevant organization into the 21st century

The inclusion of trade and environment in the environmental policy aspects of UNEP's programme is one I welcome. The operational challenge now facing UNEP is to act upon the growing political recognition that the difference between trade and environment is no longer marginal and neither is it a technical issue. It is, in fact, at the centre of the policy arena.

If it is decided at this year's World Trade Organization (WTO) Ministerial meeting in Seattle that there will be a comprehensive Millennium Trade Round, the relationship between trade and the environment will need to be addressed in future negotiations.

A key area in which UNEP is currently committed to undertaking innovative work is the development of a tool box for assessing the environmental aspects of trade liberalization. As we stand on the brink of a possible new trade round, I believe it is crucial that UNEP plays its part in laying down the framework and the criteria to ensure that the environment is fully and comprehensively safeguarded.

As the principle United Nations environment body, UNEP is well placed to make a vital and substantive contribution to the debate within the CSD. It has already done some good work in preparing for this year's meeting of the CSD on issues such as oceans, sustainable tourism, small island developing states and sustainable consumption and production. It now needs to follow this work up by providing short and well-focused documents that concentrate on the environmental aspects of sustainable development.

Earlier this year our Deputy Prime Minister, John Prescott, saw at first hand the effect climate change is having on coral reefs when he visited the Maldives. This year's meeting of the CSD will provide us with the opportunity of agreeing global action to protect our ocean heritage.

The difference between trade and environment is no longer marginal... it is at the centre of the policy arena

The sustainable use of our oceans into the 21st century is crucial to both protecting the global environment and combating world poverty. This is an area in which UNEP has developed a good deal of expertise through its Regional Seas Programme – which the United Kingdom strongly supports. We have recently contributed £165,000 ($264,000) towards this programme.

I believe there is an opportunity for UNEP to be a much more effective force for action on ocean management in providing scientific advice and enabling regional partners to work together on management cooperation and to implement existing agreements.

I would also like to see UNEP continuing its important work on voluntary initiatives and codes of conduct for a sustainable tourism industry. Tourism is one of the fastest growing industries in the world and presents a real challenge for sustainable development, involving as it does social and economic as well as environmental impacts.

Defining roles

There is no doubt that UNEP has a major role to play and I believe that we have made considerable progress towards defining that role and equipping UNEP to fulfil it. We are heading in the right direction in many key areas including financial management, administration and the focus of the work programme.

We need to take advantage of the positive atmosphere evident at the Governing Council and the clear direction that emerged from that meeting to ensure that UNEP is a vital and relevant organization into the 21st century •

The Rt. Hon. Michael Meacher MP is Minister for the Environment, United Kingdom.

A. D. Dharmasiri/UNEP/Topham Picturepoint

Spirit of OPTIMISM

JÜRGEN TRITTIN says that UNEP's decline has been reversed and that he expects it to play a central role in a strong institutional framework for environmental protection

At the end of the 20th century, environmental problems are increasingly being recognized as one of the central challenges on the political agenda. It has become clear that environmental problems do not respect national borders. This applies in particular to the threat to the Earth's atmosphere, the depletion of biodiversity, the degradation of oceans, as well as to the destruction of forests, the degradation of land resources and the depletion and pollution of freshwater resources. Environmental problems also have an impact on public health and economic development, in the short term and in the medium and long terms. They increasingly pose a threat to peace and security. International partnership in environment and development policy is needed to overcome the growing transboundary problems at both a regional and global level.

One fundamental prerequisite for a successful international environmental policy is responsible action by all actors involved, at national and local levels. For this purpose, Agenda 21, adopted in Rio de Janeiro in June 1992, emphasizes the common responsibilities of industrialized countries and developing countries in implementing the model of sustainable development, differentiated in accordance with their respective capabilities.

Another equally important prerequisite for sustainable development on a worldwide scale is a functioning system of international institutions. UNEP, being the only United Nations institution dealing exclusively with environmental policy, plays a central role in this regard. Only if UNEP fulfils its role as an advocate of the environment and coordinates the multitude of environmental protection activities undertaken by numerous United Nations institutions can the scarce funds be allocated efficiently and effectively, thus allowing the common goal of improving the global environmental situation to be achieved.

Having existed for more than 25 years now, UNEP has to a certain extent become a victim of its own success. Ever since the 1972 Stockholm Conference, and particularly since ▶

the United Nations Conference on Environment and Development held in Rio in 1992, the activities undertaken by United Nations institutions, financial institutions and other international organizations in the environmental field have multiplied. As a result, there has been a great deal of duplication and inefficiency, affecting both UNEP's role and prestige. This situation was compounded by both structural and administrative problems within UNEP. One consequence of these problems, as well as of the fragmentation of competencies and activities, has been a marked decrease in financial resources throughout the 1990s.

However, it now appears that the trend has been reversed. This reversal was initiated by the Nairobi Declaration adopted at the 19th session of the UNEP Governing Council in 1997. In spring 1998, the new Executive Director, Klaus Töpfer, took office, and soon won the confidence of UNEP staff, environmental organizations and governments alike. At the special session of the Governing Council held in 1998 and at the 20th session in 1999, there was a distinct spirit of optimism. Töpfer has initiated a reform process focusing on both the programme's areas of concentration and its internal structure and management. Further key decisions will have to be reached as part of a reform of the United Nations in the field of environmental policy. The proposals put forward by a Task Force chaired by Töpfer last year represent a sound basis for such a reform. In February 1999, the environment ministers meeting at the 20th session of the UNEP Governing Council expressly welcomed the proposals as well as the report based on these proposals by United Nations Secretary-General Kofi Annan, thus sending out a positive signal concerning the issue of reform to the General Assembly in New York. I hope that specific measures can be taken soon.

Central requirements

What we need at the beginning of the 21st century is an institutional structure within which UNEP can be heard as the voice of the environment. Since there have been demands for many years for the environmental aspect to be integrated into all areas of policy, the fact that there is a great diversity of actors in the field of environmental policy is to be welcomed. There is no need to centralize these activities; they should, however, be coordinated. UNEP will only be able to fulfil its important role if a number of central requirements are met. Unfortunately, this has only been the case to a limited extent so far. As a first step, UNEP's mandate has been more clearly defined by the Nairobi Declaration. As a second step, UNEP's structure and management is currently undergoing a process of modernization. A third and essential step must be to broaden the financial basis by ensuring reliable and punctual payment of contributions by as many member states as possible.

The areas of concentration for UNEP and a working programme for the next few years based on them were presented by the Executive Director at the Council sessions of 1998 and 1999:

- Strengthening the disaster prevention and emergency response capacity of UNEP, as well as its early warning and assessment functions.
- Coordination and development of environmental policy instruments in the following fields: support for conventions; chemicals; development of economic instruments for implementing international environmental agreements.
- Freshwater.
- Technology transfer and industry.
- Support to Africa.

Töpfer has the full support of member states with regard to these areas of concentration and his strategy to adapt UNEP's organizational structure to them.

In general terms, I believe UNEP will be facing a number of central challenges at the beginning of the 21st century.

John L. Perrett/UNEP Topham Picturepoint

UNEP can look back on great achievements in advancing international environmental law

One of its tasks will be to identify regional and global environmental problems and trends at an early stage, and to bring them to the attention of the international community. Its expertise and capacities in the field of environmental monitoring and assessment will be highly beneficial in this context. In addition, partnerships are needed with scientific institutions and national governments. The *Global Environment Outlook* reports are excellent examples of UNEP's capabilities in this field. One of their main merits is that they include recommendations for political response measures in their analysis, rather than confining themselves to a mere description of existing environmental problems.

Impetus and support

UNEP's work in the field of environmental monitoring and assessment must therefore aim at offering solutions to existing problems. And while UNEP itself cannot be expected to solve the problems, it should be able to give impetus to the problem-solving process and, if necessary, be in a position to provide support for the actors involved. Suitable instruments in this regard include the provision of relevant knowledge and support in capacity building, for example through environmental education and training.

UNEP can look back on great achievements in advancing international environmental law. The latest highlight in a long list of conventions and agreements adopted at the initiative of, or with the support of UNEP is the Rotterdam Convention for the Application of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. Negotiations on a regime for persistent organic pollutants are already under way. UNEP will continue its intensive work for advancing international environmental law and providing support for its implementation. In this context, UNEP should not only be made use of for its expertise but above all for its capacity to initiate and facilitate processes and to provide a forum for environment ministers and environmental experts.

UNEP's agenda must reflect the consequences for international environmental policy of worldwide trends such as globalization and economic liberalization, as well as the resulting need for an ecological framework. The 20th session of the Governing Council confirmed UNEP's important role in the field of environment and trade and called on the Executive Director to strengthen cooperation with the World Trade Organization and other institutions.

However, UNEP's most difficult task will remain coordinating environmental activities – including those of the conventions' secretariats – within the United Nations system. Being a relatively small institution with a modest budget, UNEP will have to pursue a wide variety of strategies to fulfil this role. It must be innovative and become a leading voice, while forging strong institutional partnerships. And it will have to actively advocate viable coordination mechanisms within the United Nations system. In all these efforts, UNEP will also need the support of national governments. By adopting a decision on the report of the Töpfer Task Force at the 20th session of the Governing Council, the governments made it clear that they are willing to provide UNEP with the necessary political support. I hope that this is followed by an increased financial commitment.

The world has changed since the creation of UNEP in 1972. UNEP itself has undoubtedly contributed to this process. People have become aware of environmental problems and the importance of environmental protection as an element of sustainable development. Many problems we were faced with in the 1970s have been solved or are closer to being solved. Nevertheless, UNEP has not become superfluous. On the contrary, a strengthened UNEP is needed to tackle the new challenges of our time •

Jürgen Trittin is Minister of the Environment, Nature Conservation and Nuclear Safety, Germany.

Meeting new *CHALLENGES*

GURO FJELLANGER says UNEP must create a united and forceful profile in tackling complex new threats to health and the environment

The end of the millennium represents a cross-roads in many respects. For the environment, this is a time of dynamic change where policy tools must be continuously developed and adapted to new issues and challenges. As the United Nations organ mandated to play a central role on environment matters, UNEP must also adapt and respond to new priorities and solutions.

Since UNEP's beginnings, there has been a substantive shift in environmental priorities and the policies used to address them. Although much remains to be done in the face of the traditional pollution-related problems, the policies needed to prevent and cure these are generally well understood and are increasingly being refined and implemented. In recent years, a more complex set of environmental challenges has come to the top of the agenda, including climate change, biodiversity and the sustainable management of forests, oceans, freshwater and land resources.

Policy integration

The 'new' threats to the Earth's natural resources and to human health are complex and rooted in economic structures, making it more difficult – and all the more necessary – to increase our knowledge, to reach a common understanding and establish a platform for action. Solutions to environmental challenges must increasingly be found in cross-sectoral and integrated policy approaches. They must involve ministers other than just environment ones, and actors other than governments. A wide range of stakeholders must be involved in policy formulation and implementation.

Many of today's challenges are also of a global nature, requiring international as well as national responses. The international mobility of capital and goods has made countries increasingly economically interdependent. Information, ideas and cultural values are subject to globalization, and will also be a factor in how society develops. Environmental policies must also seek to redress the fundamental global imbalance whereby the world's aggregate consumption and production is threatening its natural resource base, while a large part of its population is unable to meet primary basic needs.

UNEP has been committed to environmentally sustainable development since its inception, and has played a key role in the international negotiation of conventions and protocols, plans of action and codes of conduct in an impressive number of areas. The increase of such instruments has strengthened the United Nations' environmental profile, but has also brought an undesirable level of thematic and institutional fragmentation. I am convinced that UNEP's (and the United Nations') ability to play a key role on environmental matters in the future largely depends on the extent to which it succeeds in bringing together and creating a forceful and united profile on them.

The Secretary-General's overall process of United Nations reform – and the focus on coordination and consolidation – provide an excellent framework for the 'revitalization' efforts that have been launched by Klaus Töpfer since his arrival at UNEP. Last year I had the privilege of being a part of the Task Force set up by the Secretary-General to suggest ways of focusing and strengthening performance on environment and human settlements issues. It identified a series of organizational, administrative and practical steps to be taken over time to create a more coherent United Nations profile in these areas. These have since been put to the General Assembly for further consideration and follow-up.

Political engagement

Governments will continue to be the main actors on the national level and the contractual partners on the international level, now and in the future. Other actors representing other sectors of society will also have important roles. It will therefore be critical for UNEP to facilitate and promote political engagement and accountability and secure broad participation in the international opinion-forming and decision-making processes. The political process must continue to rely on professional analysis and on a decision-shaping process in which both government experts and the international secretariats play a full part. The processes should as far as possible be organized openly and transparently, with access for all relevant stakeholders.

Hasan Sultaliki Darabad/UNEP/Topham Picturepoint

We must now give UNEP the tools that it needs to come into its own as the United Nations' central voice on the environment

I feel particularly strongly about the recommendations from the Task Force that involve the consolidation of intergovernmental processes, including the proposal to establish one global ministerial arena to take stock of the larger environmental trends and achievements, respond to emerging issues and uncover neglected areas. Looking ahead, UNEP's Governing Council should become the central meeting place for politicians, scientists, government experts, the media, the business community, non-governmental organizations and other representatives of civil society on environment matters.

Scope for coordination

It is increasingly recognized that there is scope for coordinating functions between convention secretariats, and that UNEP's future role must include, and be based on, closer links with the conventions. Where possible – and with due respect to the differences in participation – uniform standards and procedures for support functions to the conventions (i.e. scientific input, dispute settlement and enforcement routines) should be developed and offered to the secretariats. We cannot afford not to explore ways of capitalizing upon the administrative and thematic interlinkages between conventions, including the geographical co-location of convention secretariats in thematic clusters.

The Task Force recommended the establishment of an Environment Management Group within the United Nations to facilitate the coordination of environment and environment-related programmes between agencies. UNEP is not an implementing agency, although its credibility as a normative authority requires it to carry out, or take part in, pilot projects to test policy models and further policy formulation, when necessary. UNEP has a role to play in bringing together implementing agencies, financial institutions and other stakeholders involved in environment-related matters. its part in the pursuit of sustainable development is to help set the premises, to play a catalytic role and to draw on the resources and capacities of other organizations and actors.

The 1997 Nairobi Declaration already states what UNEP can and should do. UNEP's 'comparative advantages' have been demonstrated and should continue to lie in the interface between science and research, policy and legal instruments. These aspects need further strengthening, particularly the core functions of science and research.

UNEP's 20th Governing Council in February endorsed the Task Force's main recommendations and reconfirmed the validity of the Nairobi Declaration. As we look ahead, we already have a vision for UNEP and a platform for action. We must now give it the practical and administrative tools that it needs to come into its own as the United Nations' central voice on the environment •

Guro Fjelianger is Minister of the Environment, Norway.

Under threat

ASHOK KHOSLA says that governments of industrialized countries are preventing UNEP from fulfilling its potential

Three short decades ago, the concept of environment was virtually unknown in any national government – and unheard of in intergovernmental fora. Today, it rivals global trade and peace-keeping in dominating international dialogue. The credit for this revolution is largely due to the dozens of global conferences organized by the United Nations, and particularly to the institutional outcome of the first of these held at Stockholm – UNEP. (The ultimate credit probably goes, in turn, to the vast number of civil society organizations, non-governmental organizations (NGOs) and other groups which created the demand for these conferences and institutions in the first place.)

UNEP, set up in 1972, was designed to be different from any earlier agency. Its overall mission was systemic: to promote processes of development that are in harmony with the imperatives of nature. Its objective was to get other United Nations agencies, governments and actors in civil society to internalize the environment into their decision-making processes. Its primary mode of operation was catalytic – to reorient their thinking and activities through small and temporary, but critical and highly-levered, inputs of knowledge and money. And, partly in recognition of the close connection between poverty and environmental degradation – and as a commitment to give the highest priority to these issues – it was the first major United Nations body to have its headquarters in a developing world capital, Nairobi.

Despite its relatively small secretariat, UNEP quickly succeeded in mobilizing governments all over the world to set up the machineries they needed to protect their environmental resources and to negotiate international agreements. In less than 10 years its efforts, and those of its partners, helped raise the number of countries with environment ministries 20-fold. At the same time, it established a wide range of global and regional programmes for monitoring the environment, exchanging information and taking cooperative action to protect fragile ecosystems such as the regional seas. Within another 10 years, it had effectively mobilized and finalized negotiations on international conventions aimed at protecting the global environment: the Montreal Protocol, the Basel Convention, the Biodiversity Convention and the Climate Change Convention. UNEP's successes compare favourably with those of any other United Nations agency.

A declining mandate

Yet, as it approaches the end of its third decade, UNEP appears to have become peripheral to many of the processes it so successfully set in motion. It is now surrounded by a host of progeny, each with its own mandate, its own conceptual walls, its own bureaucracy, its own location – generally as far away from the others as possible – and as a result, its own institutional ego and instinct for survival. With each successive global conference a new, permanent organization has been created to carve out for itself yet another part of UNEP's original mandate. Each global environmental convention has led to the setting up of its own secretariat. The Earth Summit in Rio resulted in two: the establishment of the Commission on Sustainable Development (CSD) and the adoption of the Global Environment Facility (GEF), closely associated with the World Bank, as the funding mechanism. All the while, UNEP's own mandate and budget have continued to decline.

UNEP, the 'environmental conscience of the world' and the agency ordained by governments to deal with threats to the planet's life support systems, now appears itself to be under threat.

Why? Is the organization's performance unusually poor? Or could it be inadequate for the tasks assigned to it?

UNEP's mandate was quickly circumscribed in a manner that prevented it from taking many imaginative initiatives

Boonkorn Barunbangpot/UNEP/Typhoon Picturepoint

Or worse, is it becoming inconvenient for the global powers that be?

One thing is clear: nothing much can happen unless it is willed by the governments that set the international agenda and drive the negotiating process. Their motivations and methods take many forms.

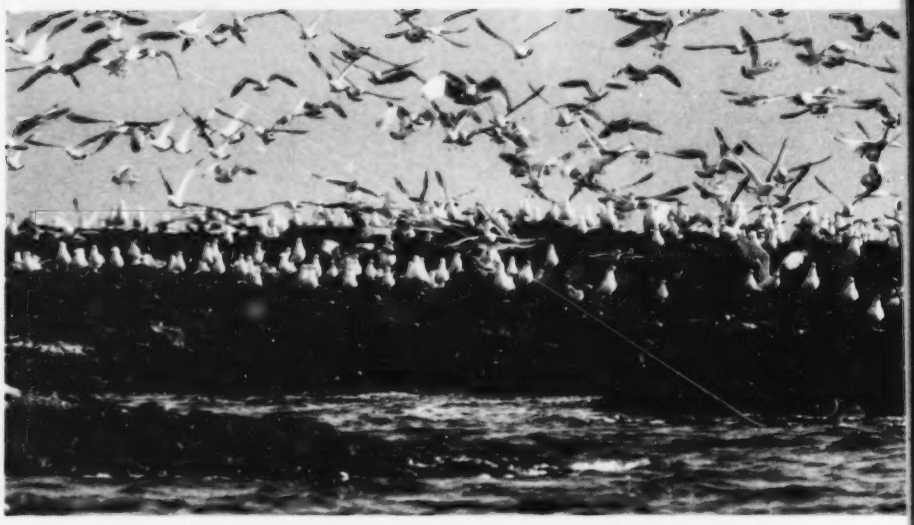
Has UNEP underperformed? Yes, but UNEP is manifestly no more or less inefficient than any other international organization. Throughout its existence, UNEP has had to work within extremely tight budgets (sanctioned by the governments that primarily finance it), far smaller than some national and international NGOs working in the field of nature conservation. Yet – despite its many achievements – it has been constantly criticized for having inadequate impact (by the same governments). Certainly, the new entities set up to bypass UNEP cannot claim or even promise any better results.

Could UNEP have delivered on the hopes that the international community had placed on it after Stockholm? Perhaps not, but it was never given a chance to find out. Its mandate was quickly circumscribed in a manner that prevented it from taking many imaginative initiatives that could have made a difference.

Perceived threats

Is UNEP a problem for those who dominate the international negotiating table? Almost definitely, yes. Some of its nascent initiatives – such as those on consumption patterns and production systems – were ridiculed and quickly killed. Many of its successes were seen by some powerful governments as threats to their national interest. Narrowly conceived self-interest and political expediency have led to the withdrawal of support or the setting up of separate ▶

Sayeed S. Sudara/UNEP/Typhoon Picturepoint



Kim Ha Tuel/UNEP/Topham Picturepoint

agencies, even though the issues are inextricably linked and can only be dealt with together. And the agencies' programme priorities have been set by those who contribute the most financial support to them, not necessarily according to the overall seriousness of the issues.

In the name of achieving quick results and minimizing costs, the donor governments insist on defining environmental problems in narrow and mechanistic terms and on artificially squeezing them into 'single-issue' approaches. Never mind that any simplistic solution which ignores the complex linkages inherent in environment and development is doomed to failure; this method also facilitates splitting agencies, a standard and effective strategy of divide and rule. The constellation of United Nations agencies with environment-related mandates is now fragmented all over the globe – Bonn, Geneva, Montreal, Nairobi, New York, Osaka, Paris. And not always with any great logic: the CSD, which purports to champion the concerns of the South, is domiciled in New York, while UNEP, which increasingly has to deal with the environmental concerns of the North, continues to be in Nairobi. Those nations which can afford specialized and well-staffed delegations for each topic obviously have considerable negotiating advantages over those who cannot.

A receding goal

As a consequence, the goal of sustainable development recedes into the distance, enveloped by a mist of institutional territoriality, knowledge gaps and growing transactional costs.

The sustainable development agenda has largely been written by the industrialized countries, but very few of them are willing to follow it in their own policies. Northern scientists discovered the threats to the global environment – first to the stratospheric ozone shield, then to the world's climate systems and then to the survival of our gene pool. All these have been caused almost entirely by actions in Northern countries over the past two centuries, but their governments have persuaded the rest of the world that it is now everyone's responsibility to do something urgently to mitigate them. Treaties have been signed and promises made that money and technology will be made available to countries in the South to help them design more sustainable development strategies.

Where are we, so many years after the various agreements were signed? Basically, nowhere. The only positive outcome seems to be the decline in the use of ozone-depleting substances. Biodiversity loss continues apace and carbon emissions continue to rise. Industrialized countries have not been able to slow down their energy consumption or carbon dioxide emissions. Now, they are trying to pass the onus on to others through such artifices as tradeable permits, joint implementation and even outright demands for the larger countries like China and India to cut back. JI, CDM and the rest of the United Nations alphabet soup, may well be sensible devices to improve energy efficiency at least cost, but they cannot be substitutes for domestic action to cut carbon emissions in the developed countries themselves.

Less than 1 per cent of the agreed international price tag to implement Rio's Agenda 21 has actually found its way into the GEF. And even that amount is controlled so rigidly that it can only be used for the two basic focal areas of climate change and biodiversity conservation. There is effectively no international money available for the implementation of Agenda 21, the sole instrument from Rio that deals directly with the immediate concerns of the half of humanity which is poor.

It is difficult to imagine how everyone's basic needs will be met and our environmental resources regenerated without fundamental changes in our consumption patterns, production systems and strategies to achieve a fairer world order.

But who, if not UNEP, is going to bell the consumption cat? After all, it is the dominant life styles and production systems that are causing these global problems in the first place. Under the present rules of the game, it is quite unacceptable to question these at the international level. Can we continue to assume that we can go on raping and pillaging the Earth as we – or at least some of us – have over the past 200 years, and continue to smear her with all our wastes and garbage, without any possible damage to her productivity and health?

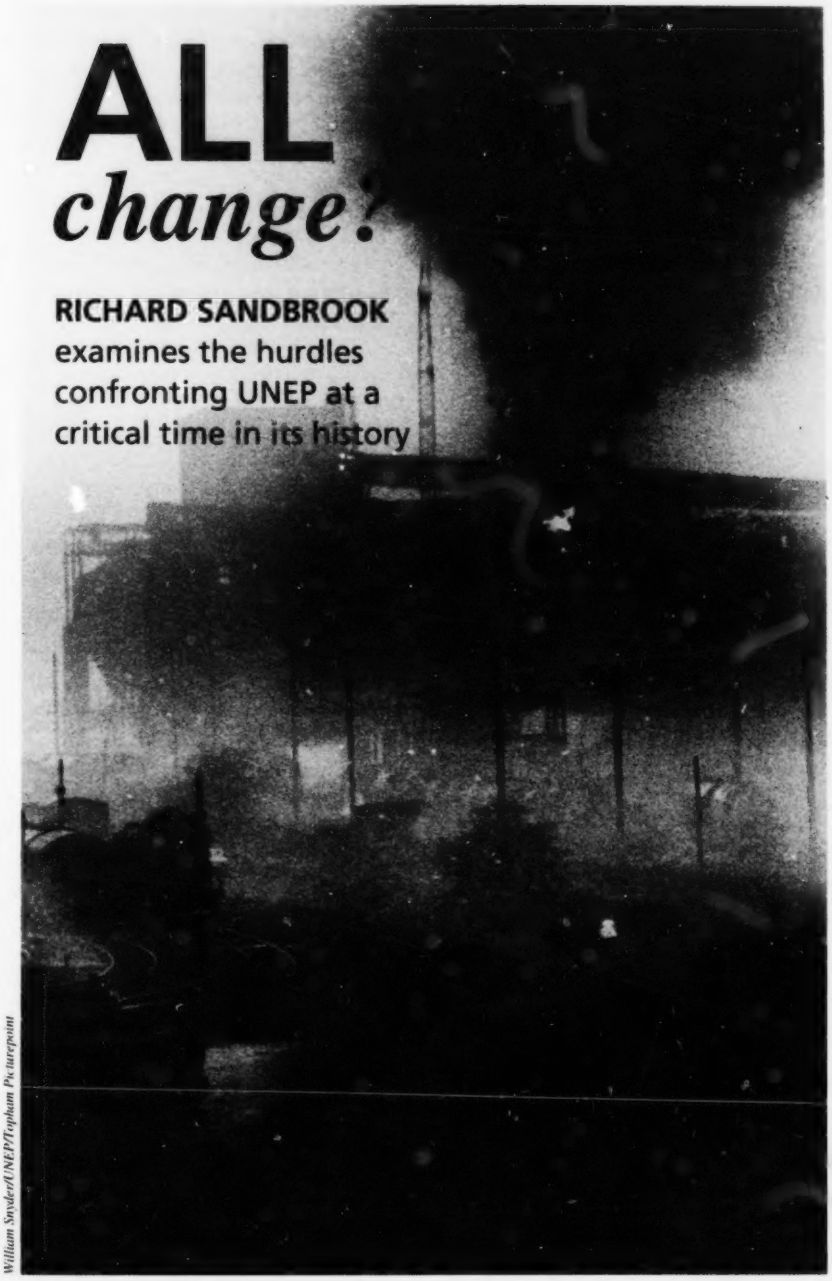
Which international agency, if not UNEP, can evolve genuine solutions to the twin problems of poverty and population growth? And which can ensure the creation of sustainable livelihoods and genuine empowerment of people through entirely different forms of governance, technology and environmental care?

When Earth Summit 3 meets, as is now proposed for 2002, civil society will once again acquire a major responsibility, this time to persuade governments to rationalize the United Nations structures and inter-governmental processes in the field of sustainable development. To achieve any useful results, we must start work on this campaign now•

Ashok Khosla is President of Development Alternatives, New Delhi, India.

ALL change?

RICHARD SANDBROOK examines the hurdles confronting UNEP at a critical time in its history



William Snyder/UNEP/Topham Picturepoint

There is reason for those who have watched the difficult times experienced by UNEP to give a gentle cheer. A corner may have been turned with the arrival of Klaus Töpfer as the agency's new Executive Director and the latest meeting of its Governing Council, in February.

Many of UNEP's problems go back to the run up to the 1992 Earth Summit, when its role was never properly clarified. The result was a mess, nay a compounded mess. By 1992 a number of Multilateral Environmental Agreements (MEAs) had been established with their own secretariats and Conferences of the Parties (COPs) based in various capitals. Their allegiance to the small catalytic agency that had parented many of them was unclear. Then at Rio the governments agreed to a climate convention, a biodiversity convention and eventually a desertification convention, all with their own secretariats – and that the Global Environment Facility should help with finance. Again the relationships were not clear. To compound the difficulties, the Commission on Sustainable Development (CSD) was created with a small secretariat in New York, to follow up on the Earth Summit and report (along with UNEP) to the United Nations Economic and Social Council (ECOSOC). It might have worked if all these bodies had been sited in Nairobi, Geneva or New York – but not when they were scattered across three continents.

Failure to inspire

So what was UNEP to be for? In the past, it had had a patchy record. On the plus side it had spawned many of the key environmental conventions, a number of useful regional processes and an arm in Paris that was setting about reforming industry. But it had failed to inspire in its central task of monitoring and evaluating environmental trends, and it was constantly hamstrung in advancing capacity building – a vital ingredient of national and regional progress.

Unless integration starts at home desintegration will surely follow abroad

Discontent among governments had reduced the annual budget to below $50 million a year; too little to count and far less than the amount spent by many an environmental non-governmental organization (NGO). It all got to crisis proportions by late 1996/early 1997, when some donor countries froze their contributions. Something had to change.

In the spring of 1997 the governments agreed to the Nairobi Declaration, designed to set out a new mandate. Klaus Töpfer took over in early 1998. He was asked not only to take on UNEP but also to head a Task Force to review the whole operation for the environment in the United Nations for Kofi Annan, the Secretary-General.

In May of 1998 he set out his thesis on four major trends: the proliferation of institutions on the international environment; the increasing polarity of wealth and access to technology in a freer 'globalized' world of trade; environmental trends and events that ▶

threaten the very security of nation states; and the failure to integrate social, environmental and economic management. It may seem familiar stuff. But what was fresh was the way the new Executive Director faced up to the first issue – the fragmentation and proliferation of institutions. At present every department in national government has its own pet agency. Indeed UNEP, and the CSD, can be seen as the environment ministers' clubs; the World Health Organization that of health ministries; the World Bank and International Monetary Fund those of treasuries and so on. Unless integration starts at home disintegration will surely follow abroad.

Töpfer reminded everyone that the Nairobi Declaration (one optimistically assumes as agreed by cabinets and not just ministers) stated that the focused mandate of UNEP would be about analyzing the state of the global environment, assessing global environmental trends, providing policy advice and early warning on threats, and catalyzing and promoting international cooperation and action, based on the best scientific and technical capabilities available. This would involve the development of international law, coherence between existing laws and conventions, and compliance with them.

Aiming high

There was also a clear coordination job to be done in the United Nations as a whole, with UNEP taking the lead on environmental matters. On the all-important issue of capacity building, UNEP was to promote greater awareness and facilitate effective cooperation among all sectors of society and to provide policy and advisory services in key areas of institution building to government and other relevant institutions.

All very sensible stuff, but very hard to pull off given the Byzantine nature of the United Nations. However Töpfer, through his Task Force, is going for the high ground; its recommendations were, after protracted deliberations by the Secretary-General, owned by him and presented to the General Assembly for approval. The recent Governing Council has provided valuable support by pushing for coordination among the conventions and close cooperation with the United Nations Centre for Human Settlements and the United Nations centre in Nairobi. It also called for the creation of an Environment Management Group for the United Nations alongside the all-important Administrative Committee on Coordination.

The millennium, when presidents and prime ministers will set targets for the new century, could be a turning point for the United Nations. Cynics may smile, but there is clearly great potential for UNEP.

Some powerful leaders have urged the creation of a World Environment Agency to match the power of the World Trade Organization (WTO). President Chirac raised it again at the 50th anniversary celebrations of the World Conservation Union (IUCN) last autumn. Broadly speaking, governments have liberalized trade far ahead of any social and environmental checks and balances. The WTO is a much bigger player than UNEP, or even ECOSOC. Yet the MEAs have enormous trade implications – as over biodiversity and genetically modified organisms, climate change and traded climate permits. So why not upgrade UNEP? Indeed, the United Nations General Assembly has stated: 'The role of the United Nations Environment Programme in the further development of international environmental law should be strengthened, including the development of coherent interlinkages among relevant environmental conventions in cooperation with their respective conferences of the parties or governing bodies'.

Can a reinforced UNEP really impact the trade agenda and 'globalization'? Who knows? Meanwhile Töpfer is all for 'renewing and strengthening UNEP's work on Trade and Environment' and for 'building closer links between international trade and environmental policies'. No doubt the links between environmental law and trade are important. But will UNEP be up to the task? The Executive Director seems to want a key role in defining the as yet undefined, trading regime for climate change mitigation agreed at Kyoto, and to be in the vanguard of the coming disputes between MEAs and the trade regime. The European Union (EU) statement to the Governing Council provides some encouragement: 'The EU supports the analysis and underlines the proposed actions for UNEP in the future in the area of economics, trade, and financial services and considers them important... to this end the EU stresses the importance of the envisaged closer cooperation with the WTO.'

Multiple issues

There are many other priorities to address, such as the issues that went before the CSD in April (oceans and seas, marine pollution from the land, sustainable tourism, small islands, changing consumption patterns). Others include environmental technology, pollution and UNEP's monitoring and assessment function – not to mention the all-important role of its six UNEP regional offices. And all this is to be done on a budget of $100 million in the 2000/2001 biennium and $120 million in the next.

Much now depends on the team Töpfer builds to back him up. Can he regain the respect of the 'professionals' outside the United Nations? Will he be able to further expand the miserable budget? Will he be able to work again with the many actors who are not a part of the United Nations at all, such as the policy research institutes, universities and membership NGOs? It is going to be a tough road.

But so far so good. The United Nations must have the environment on its agenda, if only to build the much needed capacity at the all-important national and regional levels to produce anything approaching sustainability. We continue to need strong norms, and even laws, if the world is going to avoid an environment trade war. And we will not even meet the Organisation for Economic Co-operation and Development's ambitious poverty allieviation targets halfway if the natural substrate of so much economic activity is allowed to burn or wash away in tomorrow's uncertain climate•

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SAFETY DENIED

TEWOLDE BERHAN G. EGZIABHER wonders whether the North is serious about negotiating a Biosafety Protocol

The world expected a sufficiently robust Biosafety Protocol to come out of negotiations that took place in Cartagena, Columbia in February. It did not happen. I was there, a Southern negotiator. We will try to negotiate once more, but I am not optimistic.

My pessimism is based on weighing the considered intransigence of the Miami Group (United States of America, Canada, Australia, Argentina, Chile, Uruguay) and also – despite propaganda to the contrary – largely of the European Group. I have examined the controversial provisions included, and excluded from, the Chairman's draft Protocol, which was the basis for the last days of negotiations in Cartagena. In this, things went the way the South – represented by the Like-Minded Group – wanted only once for every 2.8 and 4.6 times they went the way the Miami and European Groups, respectively, wished.

When I counted the number of times the positions of the Like-Minded and Miami, Like-Minded and European, and European and Miami Groups coincided, the numbers were nil, 18 and 57, respectively. In spite of the propaganda, therefore, the European Group sided with the Miami Group more than three times as often as with the Like-Minded Group. The negotiations were therefore, as ever, between North and South.

Also as ever, the motives were money and power, with the North Americans wanting to continue their global control, the Europeans trying to reassert an equal right to the global foray, and the Southerners trying to avoid continuing to be the prey.

These desires were expressed in many ways. I will give only some examples.

Socio-economic considerations. The Miami and European Groups would not allow the use of socio-economic variables even in risk assessment. The Chairman's draft Article 24 contains the statement: 'Parties, in reaching decision on import, may take into account... socio-economic considerations'. This is useless because it is qualified by the phrase 'consistent with their international obligations', which means, in effect, that they have to give priority to facilitating free trade. Thus Southern nations are expected to accept whatever disruption genetically modified organisms (GMOs) might cause their societies and economies.

Liability and redress. The South needs an international regime on strict liability. As the Convention on Biological Diversity states, genetic engineering is new and we do not know what damage it might cause. We are told that even the insurance services in the industrialized countries do not cover anything to do with the biotechnology industry. So are we, outsiders, to trust it completely? No wonder that the South proposed a fully developed international regime on strict liability. But the European and Miami Groups refused even to consider it. As a compromise, the South insisted on meaningful moves in the Protocol towards a strict liability regime over the next four years.

Subordinating safety to trade. There also were fights directly over trade, with both the Miami and European Groups staking their claims to continue to control the South's resources and trying to outsmart each other in the process. They both wanted the domestic laws of Southern countries to be subjugated to other – meaning trade – agreements, when aiming at a higher level of environmental protection. Similarly, they wanted facilitating trade to override safety considerations, and wanted to stop domestically produced GMOs having preferential treatment. How ▶

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We will try to negotiate once more, but I am not optimistic

different is this from stating that the South will not be allowed to develop the capacity to produce GMOs?

The European Group seems to have felt that the Miami Group had an advantage over them in genetic engineering. The latter agreed, and promoted an article to subjugate the Protocol to the World Trade Organization agreements, so that they might flood Europe with GMOs and kill its genetic engineering. The European Group thus wanted the article removed and the Like-Minded Group supported them.

Precautionary approach. The Miami Group totally opposed the precautionary approach. The European countries made bold statements about it to appease their public, but were quick to drop the article that would have put it into effect, in the face of the Miami Group's opposition, retaining it only in the Preamble. In a much less noticeable way, they also agreed to eliminate the precautionary approach from other operative articles.

Human health. The Miami Group also wanted all health considerations deleted from the Protocol. The European Group, perhaps feeling that its public would scrutinize health issues thoroughly, wanted them included in most cases. But even they stopped short of subjecting GMOs for pharmaceutical purposes to the Advance Informed Agreement procedure (see below). This was to satisfy their chemical companies, showing that, when it comes to the crunch, the corporation wins!

The Advance Informed Agreement (AIA) procedure. The Convention on Biological Diversity envisages this as the heart of biosafety. But it came under the most sustained attack from the Miami and European Groups.

The South started out with the aim of ensuring that every transboundary movement of a GMO or its product would be governed by this procedure.

But the Northern Groups chipped away at the AIA procedure. They removed:

- Products of GMOs, though they contain transmissible transgenes.

- Plasmids, though they carry the transgenes and invade all sorts of cells.

- Organisms obtained through cell fusion below the taxonomic family level, though they contain novel gene combinations.

They wanted to reduce the application of the AIA procedure so that it could only be applied once. Worse still, they wanted to abridge the steps of the AIA procedure, even to the extent of sending out the notification at the same time as the merchandise. All this was to be done without increasing risk. What tricks would make this possible?

Most damaging of all were the many exemptions from the Protocol and/or from the AIA procedure, including GMOs in transit, for contained use, pharmaceuticals and commodities. As if these were not significant enough, the Conference of the Parties was expected to exempt more GMOs and any Party could exempt any or all GMOs as it wished.

With all these loopholes, there would virtually be no GMO – not even one banned in its country of origin – that could not be transported or used under the Protocol, yet in avoidance of its provisions. The only exceptions would be those GMOs which the Conference of the Parties required, under Article 8.6, always to be transported through the strict application of the AIA procedure. And if the Miami Group had had their way, this article would have been deleted.

Was the North serious about regulating genetic engineering at Cartagena, or did it merely wish to fool its own public and, as usual, the South?●

Dr. Tewolde Berhan G. Egziabher is General Manager of the Environmental Protection Authority, Ethiopia.

Elephants, mouse-deer and genetic modification

GURDIAL SINGH NIJAR blames the United States of America, its allies, and the European Union, for the breakdown of negotiations on a Biosafety Protocol

'When two elephants fight' goes the old Eastern saying, 'the mouse-deer gets crushed'. So it has been for the interests of the South – and the environment – over biosafety as the United States of America and Europe are preoccupied with their trade rivalry.

Developing countries converged on the historic Colombian city of Cartagena in February for the final round of negotiations for a Biosafety Protocol, confident that it would be finally concluded and adopted. Two and a half years of painstaking negotiations by 132 countries had produced a working draft of some 42 Articles to regulate the international movement of genetically modified organisms (GMOs). Two weeks later it lay in shambles. Why?

First, the United States of America-led Miami Group – a six-member coalition of the main GMO producers also including Canada, Australia and the three Southern countries of Argentina, Chile and Uruguay – blocked any provision which they perceived could hamper, even obliquely, the free and unimpeded trade of GMOs and their derivative products.

Secondly, the European Union (EU) readily gave up key provisions, crucial for protecting the environment and human health, in return for the deletion of a provision which would have subordinated the Protocol to the World Trade Organization (WTO).

The Miami Group's opposition was expected. The United States of America, and its biotechnology industry,

had opposed the Protocol from the start. But the EU's posture was rather surprising, especially to the South. It started the Cartagena round on high moral grounds, declaring itself ready to side with developing countries to ensure an effective Protocol which would protect their diversity-rich environments and peoples. But it did nothing of the sort. Instead – as became clear in the final hours – it abandoned the South.

In the end, trade considerations and the looming trade war between the United States of America and the EU dominated the negotiations and subsumed any safety concerns. This emerged clearly, for example, in the negotiations on the scope of the Protocol. Both the Miami Group and the EU proposed that GMOs destined for contained use and those that are pharmaceuticals for humans should be excluded, despite the fact that the Jakarta Mandate already agreed for the Protocol required it to cover the transboundary movement of any GMO which may have an adverse effect on biodiversity.

Manoeuvres on the Advance Informed Agreement (AIA) procedure – which would oblige countries to ensure that its exporters give prior notification to importing countries to enable them to make a risk assessment of the GMO, before the import was approved – provided an even more important example. The Miami Group wanted the procedure to apply only to GMOs intended for direct release into the environment. The South's position has always been that it should cover all GMOs, and their products.

EXCLUSION AND ESCAPE

At first the EU insisted that the first transboundary movement of all GMOs destined to be placed on the market in their viable form should be subject to the procedure. This would have included such commodities as soya bean, grains and maize. But in the final hours the EU accepted the Miami Group's position, confining the procedure to the first transboundary movements of GMOs for intentional introduction into the importing country's environment. This expressly excluded GMOs intended for direct use as food, feed or for processing, though – under a rider added by the EU – this would be re-examined at the first Conference of the Parties. Countries were left to regulate all other GMOs through their domestic legislation, an option which, of course, they already have.

The South – represented by the Like-Minded Group, formed essentially because three countries of the South (Argentina, Chile and Uruguay) had broken ranks to join the United States of America-led Miami Group – made two attempts to compromise. First, it put forward a suggestion that the clause on intentional introduction into the environment shall exclude only:

- GMOs destined for processing which do not come into contact with the environment from the time of their entry into an importing country until they are processed.

- Genetically-modified micro-organisms destined to be used under contained conditions for the production of substances other than GMOs (e.g. insulins, enzymes).

- GMOs destined for research purposes carried out under contained conditions, provided that this is not for the purpose of developing GMOs for release into the environment.

- GMOs destined to be used for the production of pharmaceuticals which do not contain, or consist of, GMOs.

Further, an 'opting-out clause' would allow Parties to decide which particular ▶

Wesselin Wetzkov/UNEP/Topham Picturepoint

GMOs should be exempt from the AIA procedure.

This proposal was rejected outright upon presentation.

The South then proposed that the AIA procedure should apply to GMOs destined for food, feed and processing, and the first meeting of the Conference of the Parties would decide how (rather than whether) it was to do so. This was rejected as well.

Accepting the proposals of the Miami Group and the EU would have had serious implications for human health and the safety of the environment. They would have excluded from the AIA procedure:

- Genetically modified fruits, vegetables and tubers for human consumption (e.g. strawberries, potato, tomato, squash, lemon).
- Bananas and fruit genetically engineered as vaccines for human consumption.
- Transgenic propagating material for breeding purposes and greenhouse cultivation.
- Transgenic canola imported for processing (at present banned in France and Greece).
- Transgenic soya and maize for animal feed.
- Genetically-engineered micro-organisms for use in yoghurt.
- Meetings of the Parties could also exempt additional GMOs.

The cumulative effect would be that the Protocol would be confined to covering only the narrowest possible range of GMOs that have been shown to pose a potentially serious risk. The risks posed by the bulk of GMOs sent to countries around the globe would be left unchecked.

In other critical areas, too, the EU shared the views of the Miami Group rather than those of the South. For example, the EU did not want the precautionary principle – which provides for measures to be taken in advance of scientific certainty – to be reflected in the operational part of the Protocol.

Again, the EU and the Miami Group opposed a Southern proposal to include a provision on liability and redress for damage caused by GMOs. They opted, instead, for a clause which would enable a separate process to begin negotiations on such a provision, but without any fixed time frame for concluding or adopting it. They also largely opposed the South's proposal that countries should take social and economic impacts of the introduction of GMOs into account.

If the Protocol had been accepted in the form proposed by the EU and the Miami Group, it would have been little more than a charter for the free and unhampered trade of GMOs and their products. Although the alternate head of the United States of America delegation, Rafe Pomerance, said 'We wanted a Protocol which would protect biodiversity and not harm world trade', it was clear that safety concerns were readily sacrificed.

It is unlikely that a Biosafety Protocol will ever emerge...

The negotiations will resume on a date as yet undetermined. Will renewed talks be any different? The EU environment commissioner, Ritt Bjerregaard, blaming the United States of America and its allies for the breakdown, said the negotiations should be relaunched and concluded, with or without the United States of America. But unless the EU sheds its earlier positions and accepts the South's concerns, it is unlikely that a Biosafety Protocol will ever emerge, even then●

Gurdial Singh Nijar, public interests lawyer and international environmental consultant, is focal person for legal issues at the Third World Network, Penang, Malaysia.

A NEW GREEN REVOLUTION

L.VAL GIDDINGS says that negotiators must stop exceeding their mandate if the promise of biotechnology is to be realized, and biodiversity protected

Many were disappointed that an agreed text for the Biosafety Protocol failed to emerge in February from the negotiations in Cartagena, Colombia. The objectives of the effort – to protect the world's biodiversity – arguably comprise the most important environmental challenge ever. After all, the other environmental challenges we face – climate change, air and water pollution, ozone depletion – are all, given enough political will and appropriate resources, reversible. But degraded habitats are, under the best of circumstances, difficult or impossible to restore. And once a habitat has been destroyed, it is gone; the species extinction that results is forever.

Why, then, was agreement in Cartagena so elusive? The preponderance of the media coverage blamed an emergent group of United Nations member states – the Miami Group of agricultural exporting countries (Argentina, Australia, Canada, Chile, Uruguay and the United States of America). It was widely reported that the Miami Group refused in the final moments to accept any of several compromises put forward by Europe in an effort to extract consensus from a long and difficult process. This assignment of blame may comfort some in the disappointing aftermath, but my observations, both in Cartagena and over the long history of the Biodiversity Convention process, indicate that the reality of events was actually quite different. And the end result, though unfortunate, may actually presage a much more hopeful trend for the future than contemporaneous reports suggested.

In fact, several compromise scenarios

Graeme Peris/Tropikum Picturepoint

were put forward in the final moments by different factions. Each faction rejected solutions that were acceptable to one or more of the others. No solution was found that satisfied everyone. Therefore, any attempt to assign blame to one faction or another misrepresents the reality of this complex and difficult negotiation.

A careful examination of the negotiating mandate laid down by the second Conference of the Parties in Jakarta shows that many of the stumbling blocks in Cartagena were issues that actually lay outside it. The negotiating group had, after all, been instructed to focus 'on transboundary movement, of any living modified organism resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, setting out for consideration, in particular, appropriate procedure for advance informed agreement'. Furthermore, the group had been instructed:

- not [to] exceed the scope of the Convention;
- not [to] override or duplicate any other international legal instrument in this area;
- [to] be efficient and effective, and seek to minimize unnecessary negative impacts on biotechnology research and development and not to hinder unduly access to and transfer of technology.

Furthermore, it added: 'The process shall be guided by the need for all Parties to cooperate in good faith and to participate fully, with a view to the largest possible number of Parties to the Convention ratifying the Protocol.'

In addition to these very clear instructions, logic, common sense, and vast experience make clear that a Protocol relating to biodiversity should focus on materials which have a realistic possibility of harming it, as stipulated in the negotiating mandate. It is difficult to see how this could reasonably be expanded beyond the small subset of materials destined to be grown in an importing country. Foods intended for consumption (whether processed foods or bulk commodities), medicines, research materials destined for use in containment, and a host of other important materials all raise important issues that should be (and in virtually all cases, already are being) dealt with, but which clearly fall outside the mandate. Yet these and other essentially extraneous issues (e.g. food labelling, socio-economic impacts, liability and compensation) increasingly occupied a disproportionate amount of the time and energy of negotiators. In the end, they are what made agreement in Cartagena impossible.

None of the stumbling blocks that fall outside the scope of the negotiating mandate were introduced by the members of the Miami Group. Several – such as whether or not bulk commodity shipments should be captured under the Protocol, or what kind of labelling or information-sharing provisions would be required either for commodities or other materials – were introduced by the European Union (EU). One can only speculate why these were so important to the EU (parochial domestic politics can be suspected) but one thing is clear: they have nothing whatsoever to do with the management of the principal, ▶

and widely recognized, threats to biological diversity.

The issue of liability and compensation – so important to some developing countries – is puzzling. Countries clearly want to ensure that their farmers are indemnified against the catastrophic consequences of a widely used new seed failing to perform; the prospect of an unexpected famine is not to be taken lightly. But reputable seed companies already have warranties in place to make good losses farmers might suffer. And the process of producing new seeds through biotechnology, inherently more predictable and certain of results than classical seed production (itself hardly an uncertain science) means that, if anything, the risks of failure are less.

DRAMATIC GAINS

Arguments by sceptics that we have insufficient experience with biotechnology products do not withstand scrutiny. Transgenic crops were grown on approximately 28 million hectares around the world in 1998 alone, with a conspicuous lack of unpleasant surprises. Farmers have never before adopted new seeds so quickly. It is an easy choice for them, considering the economic and environmental challenges they face the world over – and the dramatic gains in economy, yields and sustainability that biotechnology varieties consistently deliver. In short, it is hard to credit the assertion that we need a global liability regime to protect farmers from product failure. Aside from the legal difficulties, such an unprecedented instrument would raise, the proposal clearly fails the 'do not override or duplicate' charge in the negotiating mandate.

There is still the argument that something totally unforeseen and disastrous could happen, and that we would need a global regime to ameliorate its consequence. But this is an argument from a mis-informed nightmare: daylight shows it to be insubstantial. Everything in our vast experience suggests that the risks associated with biotech varieties are no different in kind from those we already face in standard agricultural practice. In fact the environmental benefits of biotech varieties – such as drastic reductions in pesticide use, more effective weed control, and more efficient production – make it clear that there is a much greater risk of adverse impacts to the conservation and sustainable use of biological resources if we do not put these new products into wide-scale production as quickly as possible. There is no reason to enrich a legion of lawyers preparing to deal with dire consequences that will never come.

Arguments that we have insufficient experience with biotechnology products do not withstand scrutiny

The argument that concerns about potential socio-economic disruptions should enable a country to block imports of genetically modified organisms that have been given a clean scientific bill of health is particularly troublesome. This would be a clear violation of World Trade Organization obligations. And the argument depends on the assumption that the socio-economic effect of introducing biotechnology into agriculture will be predominantly undesirable. Some justify this attitude by pointing to the negative side-effects of the green revolution. But many of these are related to the use, or mis-use, of pesticides, herbicides and fertilizers. Others point to the economic transformations of agriculture over the past 50 years. Biotechnology is helping agriculture dramatically to reduce its reliance on such external chemical supplements: United States cotton growers were able to save, at a conservative estimate, the spraying of more than 3 million litres (approximately 48 railroad tank cars) of pesticide between 1996 and 1998, through using new biotechnology varieties.

Activists concerned about the accumulation of so-called 'endocrine disruptors', who nevertheless oppose biotechnology, should be called upon to explain why products such as insect resistant crops are anything but an enormous boon to everybody living downstream from cotton, or other pest-plagued fields. Given global hydrological cycles, that is every human being on the planet.

Such negative side-effects as there were of the green revolution are dwarfed by the millions of lives saved by abundant supplies of food that could have been produced no other way. Biotechnology promises to maintain and expand these productivity increases at substantially lower environmental cost. Anything that has such an impact on agricultural production inevitably benefits biodiversity by decreasing the threats flowing from the need to feed a growing population, the principal driving force behind the continuing conversion of scarce wild-land to agriculture.

The first of a huge influx of new products that offer direct consumer health benefits are already arriving

Meanwhile, the first of a huge influx of new products that offer direct consumer health benefits are already arriving. These promise, through improved nutrition and 'functional foods', to decrease the risk of cancer, improve human and animal health, and produce human pharmaceuticals cheaply and safely.

NEED FOR RATIONAL ASSESSMENT

What of the future of the Protocol? The crystal ball is murky. There is some reason to hope that the example set in Cartagena – of insisting on realistic and implementable provisions in international agreements – might lead to a reversal in the recent trend of adopting environmental agreements based less on a rational assessment of risks and benefits than to serve the distorted agenda of small groups of political activists.

One thing is clear. If the negotiators come together to craft an agreement consistent with their negotiating instructions – and work to develop a Protocol that could actually function based on widely accepted scientific knowledge and experience – then an agreement will be straightforward and relatively easy to reach. But if posturing for domestic political consumption continues to guide key parties, then the future is much more clouded, and the fate of any coordinated global action on behalf of biodiversity is in serious doubt.

Dr. L. Val Giddings is Vice President for Food and Agriculture at the Biotechnology Industry Organization, United States of America.

Satish Kumar Gurhal/NFP/Photon Picturepoint

Hands on

ROBERT LAMB laments the disappearance of the environmental documentary on television, but finds there are new ways of covering the issues

It is ironic that the15th anniversary of the Television Trust for the Environment (TVE) should coincide with the first broadcast on a main channel in the United Kingdom of the TVE co-production, *The Last of the Hiding Tribes*. Ironic because it is the kind of film-making that TVE made its mark with in the 1980s, and which is now all but impossible to find money and slots for on the big television networks.

Four years ago TVE took the risk of investing in a two-month shoot by a Brazilian cameraman on the Indian Agency's expedition to find the scattered survivors of the once numerous Avocaneiro tribe. They were never found. However, the drama of the search and the quality of the 16 mm library footage were good enough to persuade television to commission three programmes.

The funds directed to the Brazilian partner exemplify what the Trust was set up by Carlton TV and UNEP to do: find some money outside the broadcasting world, take a risk, kick-start television commitments and weave in the environmental message without boring the viewer. Above all, try to involve talented producers in the developing world.

The founding fathers at Carlton (formerly Central TV) and UNEP set up the Trust to be a broker between the public service programmers and enlightened donor agencies that still believe the issues are more important than public relations. TVE's job was to help UNEP fulfil its Stockholm mandate to raise global public awareness via the increasingly influential medium of television. And the added advantage to UNEP was that TVE could cover controversial areas that an intergovernmental agency could not. Making sure that the facts are correct, TVE has been able to support programmes that name 'names'. It is how we established our credibility.

In the mid-1980s barely anyone had heard about the ozone layer or global warming. Natural history programming brought the wonders of plant and animal diversity into our living rooms but glossed over the complex causes of extinction.

This may be difficult to believe, but at the time these were all new issues to the watching public. Then, by presenting a new scientific finding (preferably accompanied by a good human story), finding an able director and some start-up funding, we could not go wrong. *Seeds of Despair* – started with a tiny UNEP grant – raised $7.5 million for famine relief ▶

in Ethiopia. TVE's first European co-production, *The Acid Test* (again kick-started by UNEP) added to the public pressure in Europe to agree on measures to combat acid rain. *Inside the Poison Trade* galvanized the delegates from Africa at the Berne meeting to insist on a much stronger agreement than the exporters of hazardous chemicals wanted.

Since the environment is no respecter of national boundaries, coverage of international issues also sparked global interest. Under a blueprint contract developed by TVE with leading donors, rights are reserved for a share of programme sales to help the costs of meeting an escalating demand from the less well-off countries of the world. To date we have met some 40,000 video orders. And as more programmes were made TVE built up one of the world's largest back catalogues with some 700 hours covering the key issues. Very few of those programmes would have been made if UNEP – exercising its catalytic mandate – had not taken the lead.

But much has changed since the beginning of the 1990s. Viewers are bored with doom and gloom; 'environmental' programmes of this genre are considered a ratings liability. And in programmes such as *Against Nature* some hard-line members of the movement came in for some criticism for idealizing the poverty of the developing world.

The simple fact of the matter is that the pressure groups and their allies in the media have been very effective communicators. And you do not always need big ratings. *Last Show on Earth*, our most popular co-production of all time, left no imprint, while some of the lowest rating programmes have had the most impact on decision-makers.

The science changes. There are always new reports. Some with level-headed, science-based projections that are more than a little scary. The problem is how do you interest a broadcast commissioner? More problematical still is how do you deal with complexity? Television does not cope well with explaining the grey areas. Or rather it could, but the received wisdom is that it makes the viewer reach for the remote channel changer. Television prefers the black and white; the good guys versus the bad.

Finding the story

Take just one issue – the ozone layer. In the mid-1980s we had a great story that enabled UNEP to communicate to the public what scientists had been aware of since the early 1970s: the existence of a 'hole' in the ozone layer over Antarctica; increasing quantities of UV light linked to more cases of skin cancer and eye cataracts; that the culprits are the chemicals in our fridges, aerosols, fire equipment and air-conditioners. The world has made remarkably good progress in phasing out CFCs after public alarm – responsibly raised, for the most part, by the media – forced the hand of governments. But the ozone layer in the upper atmosphere is still at grave risk from the old hardware, both dumped and still in use. Hydrocarbons – the fuel used in cigarette lighters – are the only effective replacement for HCFCs because scientists have found this first generation of alternatives to be powerful global warming agents. Where is the story here for television? How as a producer would you convince a commissioner to give you money or a slot?

The only course is to keep experimenting; to keep innovating – and not to be discouraged by rejection. The money and the slots simply are not there anymore – *Hiding Tribes* is very much the exception. In the early 1990s we gave free rein to outstanding producers from the developing world. The three *Developing Stories* series that resulted won a bagful of awards and were broadcast just about everywhere. But as the public service broadcasters slipped into crisis, our funding disappeared.

It is no good wringing your hands or talking of the 'duty' of the media. You have to catch the next wave

It is no good wringing your hands or talking of the 'duty' of the media. You have to catch the next wave. So we put handycams in the possession of local groups such as the Bougainville people who have been battling against a mining conglomerate. We invested funds to employ African producers on a high-rating series called *Africa Express* and are currently overseeing *Beyond Red*, a series shot by film-makers in the former Soviet Union to give them a chance to portray what life is like 10 years after the fall of the Berlin Wall as *they* see it.

Multi-media approach

We rely less and less on the hard-pressed commissioners in the few terrestrial stations that have preserved elements of their public service remit. The new digital and satellite channels are all nibbling away at their audience figures. And increasingly we have been looking to them to carry the stories terrestrial executives cannot commission.

Our main vehicle is the weekly *Earth Report* series on BBC World TV reaching 65 million homes. It is a genuinely multi-media attempt to reach the share of viewers we achieved in the 1980s through the satellite broadcasts, secondary carriage on 10 cable buyers, radio programmes to over 200 stations, actuality and quick time video on the web and a complete programme back-up service via the web, e-mail and fax. *Earth Report* even has its own prime-time slot on China Central TV to 300 million homes.

Nowadays the mouse can deliver the same imagery, sound and information as the TV remote control. Included in every *Earth Report* programme is a *Hands On* 'what you can do' section. With 3,000 communications and 'hits' on the *Hands On* section of our web-site per week we have stumbled on a tremendous unmet global demand for enabling information. TVE would not start a new project unless it was a cross-media undertaking.

What is the next wave? I am not sure. But given half a chance, TVE will be out there with our metaphorical surfboard waiting to catch it•

Robert Lamb is Director of the Television Trust for the Environment, set up by UNEP in 1984.

From hydrocarbons *to* bits *and* bytes

TERRELL J. MINGER and **MEREDITH MILLER** describe the telecommunications industry's search for sustainability

In early February, 1999, United Nations Secretary-General Kofi Annan, speaking to the World Economic Forum in Davos, called on multinational companies to enact and uphold standards on human rights, labour and the environment in their operations, particularly in developing countries. Kofi Annan suggested a voluntary 'code of conduct' that corporations would impose on themselves and their suppliers. At virtually the same moment, representatives of North American and European telecommunications companies were en route to Nairobi, Kenya, to make a presentation to the UNEP Governing Council on their recent efforts to develop environmental 'codes of conduct' in both North America and Europe for the telecommunications industry.

It may seem odd that one of the most innovative and influential industries of our time – telecommunications – is engaging one of the most difficult and pervasive issues of our time – the quality of the environment and the promise of sustainability. After all, telecommunications is widely acknowledged as one of the preferred 'clean' high-tech industries, with few negative waste streams or environmental impacts. Telecommunications is a clean industry – but also a large and rapidly growing one. As United States environmentalists invited by the industry to comment on its performance as part of its Communications Environmental Excellence Initiative (CEEI) recently pointed out, large companies have impacts, minimally the impacts associated with size. Large numbers of workers in commercial office buildings create impacts including energy use, solid waste (paper) generation, and non-point source pollution and water consumption resulting from office park landscape maintenance. Specific operational impacts of the telecommunications business include issues such as large-scale fleet maintenance, fuel storage, right-of-way maintenance, equipment siting, and also the significant impacts associated with the manufacture and disposal of rapidly obsolete telephone equipment.

Environmental charter

In the summer of 1997, the Center for Resource Management (CRM) was invited, based upon similar projects it facilitated with the United States advertising and golf industries, to assist several leading North American telecommunications companies in their efforts to develop an industry-wide environmental charter. The CRM is a Denver, Colorado-based environmental organization specializing in the development of collaborative and strategic solutions to complex natural resource issues. We were intrigued then, as we are still, with the potential of this particular industry to bring new thinking and new technology to ▶

Our Net Work/NEP Typhoon Picturepost

bear on difficult environmental problems worldwide.

The promise of this industry was illustrated at UNEP's February Governing Council meeting in Nairobi when Dave Heller, Vice-President for Risk Management for U S WEST, pointed out that nearly two-thirds of the world's population has never made a phone call. But contrary to the traditional interpretation of this fact – that developing countries will remain decades behind 'first-world' countries in their access to technology and their eventual efforts to catch up – Heller called for optimism. New telecommunications technologies may make it possible for developing countries to leapfrog a generation of fixed infrastructure, joining first-world countries simultaneously in the use of satellites, cell phones and other emerging technologies. Heller went on to express the vision and the promise of the telecommunications industry – 'that the transmission of bits and bytes may increasingly substitute for the burning of hydrocarbons – that search engines will eventually prove more important and prevalent than internal combustion engines.'

Providing a model

Clearly, the CEEI aspires to do more than curb the impacts of its member companies. In February, 1999, the CEEI completed its Environmental Charter for the North American Telecommunications Industry. The charter first addresses the many opportunities for the industry to seek innovation in managing its own environmental impacts. Then, it takes an additional historic step – suggesting that the use of telecommunications technology may provide solutions to other sectors in their quest for improved environmental performance. The Charter's foreword states: 'It is our hope that telecommunications may provide a model for how to increasingly substitute the movement of information and ideas for the movement of goods and people, a far less resource intensive transaction. This shift could significantly lessen the environmental burdens of the planet.' AT&T, Ameritech, Bell Atlantic, Bell Canada, BellSouth, BCT.Telus and U S WEST are the seven original signatories to the Environmental Charter. Additional North American signatories will be sought in the months ahead.

The proliferating array of telecommuications-driven devices may assist in the global transition to sustainability

Towards sustainability

The broader vision of the CEEI is that the proliferating array of telecommunications-driven devices – the internet, e-mail, e-commerce, e-medicine, e-education, telecommuting, etc. – may assist in the global transition to sustainability. Telecommunications is not just a substitute for the physical movement of goods and people, it is also capable of more widely disseminating information and ideas in general – and information and ideas that support more sustainable business and individual practices in particular. The idea that 'have-nots' are going to be more seriously disadvantaged in the future because they are 'know-nots' may be challenged by the ability of new technology to reach heretofore inaccessible populations. This ability is currently being demonstrated in the former Yugoslavia where the International Red Cross and other aid groups are making satellite phones available to refugees isolated by war, desperate to find missing family members or to communicate their status to loved ones around the world.

In summary, the North American CEEI project has achieved several important performance milestones:

- In December, 1997, an organizing conference was held in San Diego, to kick off the CEEI. The conference brought together over a dozen North American telecommunications companies, together with key representatives of the environmental community to initiate a dialogue that would eventually result in an industry-wide environmental charter.

- In 1998, the CEEI Steering Committee, consisting of representatives from Ameritech, AT&T, Bell Atlantic, Bell Canada, BellSouth, BCT.Telus, and U S WEST, and the CRM completed a draft charter for the North American telecommunications industry.

- In February, 1999, representatives of the North American and European telecommunications industry travelled to Nairobi, Kenya to make a presentation to the UNEP Governing Council regarding the opportunities for global improvement and change resulting from telecommunications technology.

- On 22 February, 1999, representatives of the North American and European telecommunications industry met in New York, along with high-ranking officials of UNEP and the United Nations to celebrate the signing of the Environmental Charter for the North American Telecommunications Industry.

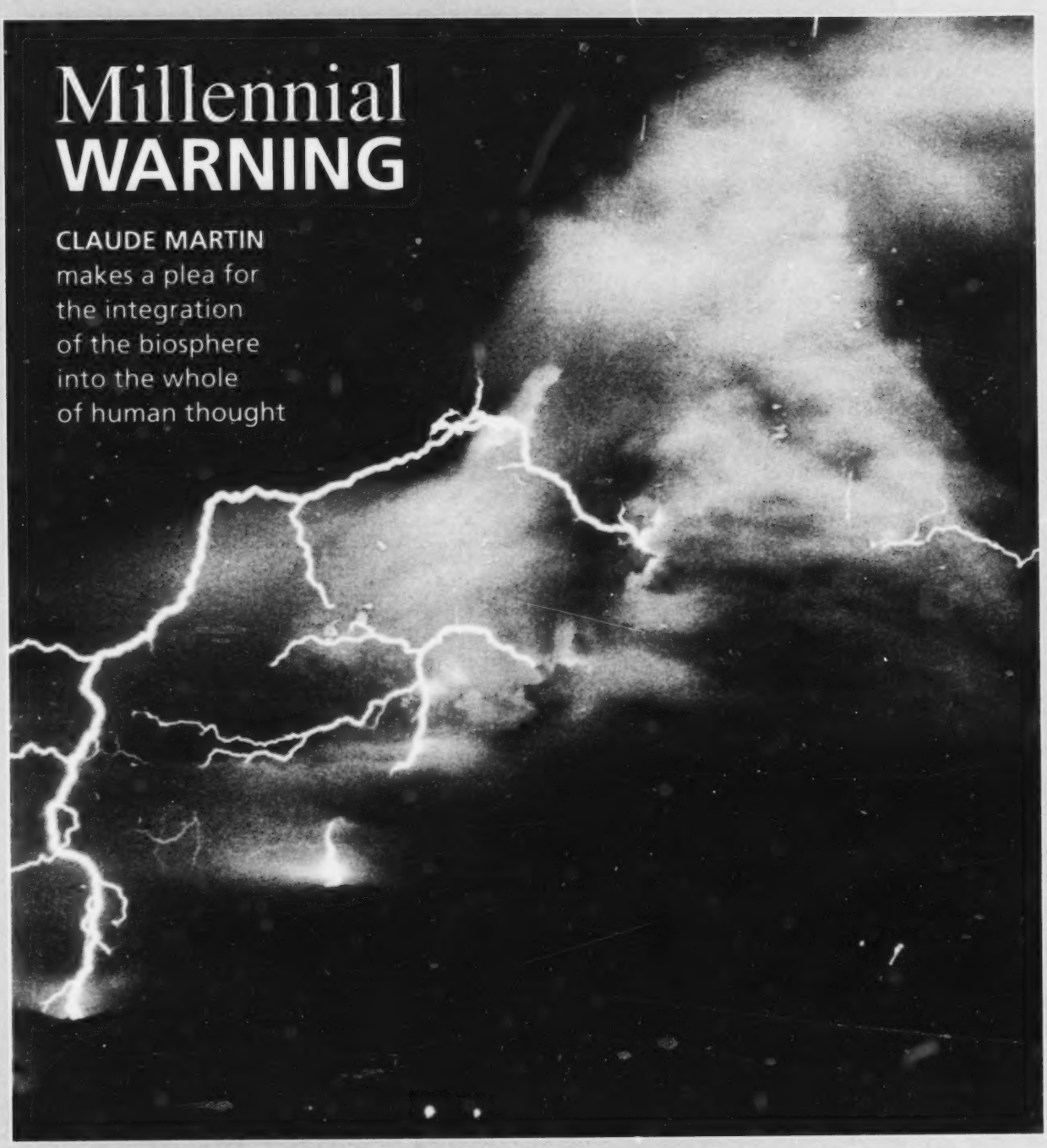
The CRM will continue to engage the environmental community as well as other industry 'outsiders' in the evolution of the project, to ensure its credibility and relevance.

The future looks promising with CEEI engaging in discussions with UNEP and the European Telecommunication Network Operators (ETNO) to identify opportunities to put telecommunications technology to work in unusual and strategic ways around the world. It is also investigating a permanent 'governance' structure to house CEEI, and considering a host of projects including compilation of best management practices for the industry, sharing methods for measuring and benchmarking environmental performance, and developing better means of communicating individual and collective environmental performance. While North American telecommunications companies do the difficult work of 'continuous improvement' at home, they will also be seeking unique situations to demonstrate the telecommunications industry's role in advancing global sustainability and democratization•

Terrell J. Minger is President and Meredith Miller is Senior Project Manager at the Colorado-based Center for Resource Management.

Millennial WARNING

CLAUDE MARTIN makes a plea for the integration of the biosphere into the whole of human thought



T. Allpalo/UNEP/Topham Picturepoint

As we approach a new millennium it is natural that people should want to look both backward and forward, reviewing the legacy of the past and reaching for a vision for the future. This is a time for taking stock, for learning lessons and for considering how we might improve the management of progress. Nowhere is all that more important than in responding to the environmental challenges we face. There is a significant body of evidence to show that the way in which we have been consuming resources and energy is increasingly damaging the biodiversity on which the survival of our planet depends. With the mystical aspect that attaches to pivotal dates, it is perhaps worth emphasizing that the closing of the millennium has been marked by violent climatic activity provoking catastrophic fires, floods and hurricanes. These might in ancient times have been accepted as omens – and for all our modern pretensions to sophistication we might also do well to take them as dire warnings.

Of course, climate change is something it would be quite reasonable to expect to see over a few thousand years. ▶

Nature does not stand still. But it is now obvious that what we are seeing is not merely a changing climate but alterations in global weather patterns that are being driven forward at an unnaturally rapid pace by human activity.

The Earth has, throughout its long history, slowly absorbed climatic shifts and adapted its systems to take account of new conditions. Forests have always acted as something of a barometer for such changes. During the glacial ages, for example, the tropics became cool and dry and their rainforest areas contracted. Long periods of drought caused once moist undergrowth and leaf litter to dry up, leaving the forest vulnerable to fires sparked in neighbouring grasslands.

Human causes

Today, however, as drought appears again in tropical zones, the rainforests burn mainly because fire is a tool used to clear them for agriculture. And, as we have seen in Asia and Latin America, these man-made conflagrations run out of control, not only destroying thousands of hectares of rainforest but also adding hugely to the production of carbon dioxide (CO_2) that is driving rapid climate change and further threatening forests.

Environmental surveys show that tropical forests in Amazonia, in Southeast Asia and in West Africa are being destroyed at an alarming and increasing rate. The highly regarded Hadley Centre for Climate Change in Berkshire, England, has a powerful computer model which predicts that unless significant changes take place there are sections of the Amazon rainforest that will turn into desert within the coming half century.

All this is not only disastrous news for the forest regions themselves, and for the countless species dependent on them, but each disappearance has a role to play in the acceleration of climate change. Trees absorb CO_2, the greenhouse gas – produced mainly by the burning of fossil fuels – that promotes global warming and consequent violent changes in weather patterns. Fewer trees clearly mean less absorption capacity, but the situation is worse than that. The Hadley Centre has found that in the aftermath of the widespread tropical fires of 1998, forests became a net producer of CO_2. What might have offered a partial solution to the ravages of global warming is thus turned into part of the problem.

Mounting evidence

It has taken us long enough to acknowledge the fact of climate change, but even though the existence of global warming and its potential for harm are now generally accepted, it remains difficult to make people understand the full extent of its effect on biodiversity – and what that means for all life on Earth. Yet the evidence continues to mount.

Recently, for instance, a new element in the destructive power of CO_2 has emerged from the oceans. Scientists have discovered a direct relationship between atmospheric CO_2 and the level of calcium carbonate in seawater. This has an effect on the ability of coral to develop its skeleton and it is estimated that during the past century coral calcification rates have fallen by up to 11 per cent as the presence of CO_2 in the atmosphere has increased.

The sooner the world community perceives the health of the biosphere as part of everyone's core business the better

Two-pronged attack

Again, as with forests, there is a two-pronged attack going on. As CO_2 affects the growth capacity of coral, so its climatic effect also raises the temperature of seawater, with the result that the coral becomes stressed and expels the algae that support it. This process, known as bleaching because the coral loses its colour, has been found to be reaching record levels, with mortality of shallow-water coral reaching 95 per cent in the Arabian Gulf, Sri Lanka, the Maldives and the United Republic of Tanzania. Even in protected areas such as the Florida Keys National Marine Sanctuary in the United States of America, coral bleaching has been reported alongside exceptionally high sea temperatures.

Of course there are those who believe that the human species is so clever, that our knowledge and skills are growing so quickly, that we will always be able to make good the damage we do. It is an illusion. What nature has developed over millions of years and what humankind has the capacity to destroy in a few short centuries cannot simply be replaced. When coral dies, for example, there is nothing we can do to recreate it. So much of what we have already lost has gone forever.

Growing pressures

And there is every sign that environmental pressures are likely to get worse. This small planet will shortly contain 6 billion human beings, who need space and shelter and energy and economic activity. Imagine the effect on our world if we carry on attempting to support such huge numbers in our old careless, destructive way.

So, as we stand on the threshold of the new millennium, we find ourselves facing a formidable task. The magnitude of that task is such that we can no longer afford to rely on groups of so-called environmentalists shouting warnings from the sidelines. Everyone must now take the field in the desperate game of life. The environment is not 'out there', a mere backdrop to our increasingly frenetic activities. It is central to our future and we are crucial to its survival.

For all of us working in what is known as the environmental movement – government agencies, UNEP, non-governmental organizations and concerned individuals – the challenge of the 21st century is to integrate the biosphere into the whole range of human thought, to reach out to development programmes, the financial community, business and industry, and the power brokers of politics.

The sooner the world community stops seeing the environment as a speciality and perceives the health of the biosphere as part of everyone's core business the better•

Dr. Claude Martin is Director General of WWF International, Gland, Switzerland.

UNEP and the private sector

UNEP's Executive Director, Klaus Töpfer, believes that the private sector has a crucial contribution to make in promoting sustainable development and is convinced that it can manage its operations in ways that enhance development, ensure environmental protection, and promote social justice.

UNEP is working in partnership with business and industry to ensure greater corporate responsibility and accountability, with each of its divisions having specific projects. One in particular, the Technology, Industry and Economics Division, aims to encourage decision-makers in government, local authorities, and business and industry to identify and adopt policies and practices that are:

- Cleaner and safer.
- Make efficient use of natural resources.
- Ensure environmentally sound management of chemicals.
- Incorporate environmental costs.
- Reduce pollution and risks to humans and the environment.

UNEP organizes annual consultative meetings with more than 50 international industry and trade associations to discuss emerging sustainable development issues and identify partnerships. UNEP has also initiated regular conferences with the International Chamber of Commerce (ICC) involving government officials and non-governmental organizations. In partnership with corporations and/or through industry associations, UNEP has developed guidelines on environmental management which have been used by the World Bank.

UNEP's successful partnerships and voluntary initiatives with the private sector include:

- With the chemicals sector, developing a Code of Ethics and a programme on accident prevention.
- With lenders and investors, through the UNEP Financial Services Initiative.
- The Interntional Cleaner Production (CP) Declaration signed by 15 Ministers and senior government representatives, together with 13 business leaders.

The Global 500 1999

The main celebrations on World Environment Day, 5 June 1999, will culminate with the presentation of UNEP's Global 500 awards to individuals and organizations who have fulfilled the aims of World Environment Day by making a major contribution to the protection of the environment. Recipients of the 1999 Global 500 awards are:

ADULT CATEGORY

Bebe Arcifa Ajodha, Trinidad and Tobago
All-China Women's Federation, China
Vilmar Sidnei Demamam Berna, Brazil
Kenneth L. Chamberlain, United Kingdom
Global Environmental Action, Japan
Sampson Osew Larbi, Ghana
Captain C. P. Krishnan Nair, India
Makoto Numata, Japan
Pennsylvania Senior Environment Corps (PaSEC), United States of America
Russian Association of the Indigenous Peoples of the North (RAIPON), Russia
Verna Simpson, Australia
Professor Masayuki Tanaka, Japan
Toyota Motor Corporation, Japan

YOUTH CATEGORY

Enviroworks, Canada
Junior Eco-Club, Japan
Kruti Parekh, India
Water Partnership Project, South Africa

Sasakawa Prize Selection Committee has new Chairman

Lord Stanley Clinton-Davis of the United Kingdom has been appointed Chairman of the UNEP Sasakawa Environment Prize Selection Committee by the United Nations Secretary-General.

Lord Clinton-Davis, Chairman of Europe 21 and Joint President of the Society of Labour Lawyers, was made a life peer of the House of Lords in 1990. He is also President of the British Airlines Pilots Association and Joint Chairman of the Advisory Committee on the Protection of the Seas. Prior to being appointed a member of her Majesty's Privy Council in 1998, he was the United Kingdom's Minister of State, Department of Trade and Industry, as well as a Member of the Commission of the European Communities with responsibility for Transport, Environment and Nuclear Safety. In 1988, he was the first person to be awarded the European Medal for Animal Welfare, and in 1989, he was awarded the Grand Cross of the Order of Leopold II by His Majesty the King of Belgium, for his services to the European Community●

Keeping the FLAME

IAN JOHNSON

It took two centuries of environmental degradation before worldwide concern brought world leaders to Stockholm in 1972 for the first ever summit dedicated to the environment. The meeting was a great boost to the still-young environment movement and saw the establishment of a new international agency – UNEP – to keep the environmental flame alive.

The web of international environmental treaties that have been negotiated over the past couple of decades owes a great deal to UNEP's role as advocate for greater environmental responsibility. Equally, UNEP has quietly promoted environmental management capacity in developing countries and pushed to include environmental considerations in social and economic policy.

Forging links

The Earth Summit held in Rio in 1992 gave new impetus to this work by placing the environment at the centre of the development debate. The great legacies of that Summit – Agenda 21 and the Conventions on Climate Change and Biological Diversity – helped forge linkages between natural ecosystems, people, and the fight against poverty. The World Bank's work in this area draws heavily on the achievements of Rio.

Nevertheless the economic crises in East Asia and Latin America show the fragile nature of some of these gains as countries, faced by imminent financial collapse, ditch environmental safeguards and cut back on public spending designed to protect the environment.

But it is not just in East Asia and Latin America that we have cause for concern. I do not need to rehearse in the pages of this magazine the enormity of the challenge. The world's forests continue to be depleted at an alarming rate. Urban pollution takes a huge toll on people's health. Topsoil is washed away in vast quantities. Fishstocks are depleted devastatingly fast. There is mounting evidence of climate change. And all kinds of biological species, on land and under water, are threatened – in many instances, with extinction.

We need to lift our sights to more distant horizons. Political cycles are notoriously short. Economic methodologies tend to discount anything older than five years. And financial markets adjust in fractions of a second. None of this promotes the kind of long-term thinking that is needed for sustainable development.

We also need greater international dialogue and cooperation. This is where we will all benefit from a strong UNEP energetically engaged in assessing trends, harmonizing environmental standards and bringing the international community together. The momentum created by technological advances, the demands of public opinion and a new sense of government and corporate responsibility for the health of the planet provide an opportunity for UNEP to champion new approaches to dealing with pollution and conserving natural resources. No other international organization has the track record or mandate.

Real change

Many environmental problems will not be commanded or controlled. Others will not bend to the market. There are few easy answers but UNEP can serve us well if it brings its authority to documenting and disseminating experience about how to deal with intractable old environmental problems as well as emerging new ones. This would be a good way for UNEP not just to raise the world's environmental consciousness but to bring about a real change in the way we understand and approach sustainable development.

The only way that we will succeed in making development more sustainable is by acting in partnership – with governments, international agencies, the private sector, local communities, non-governmental organizations and others. We look forward to a strengthened partnership with a strengthened UNEP in the months and years ahead•

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